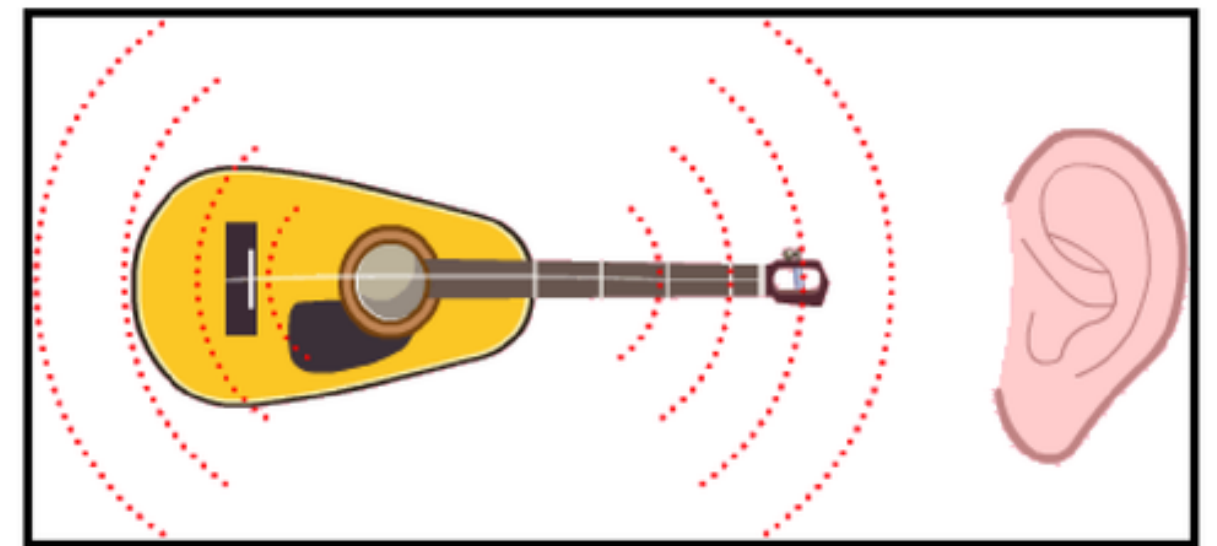


Year 4

Sound



Key Vocabulary

Key Vocabulary			



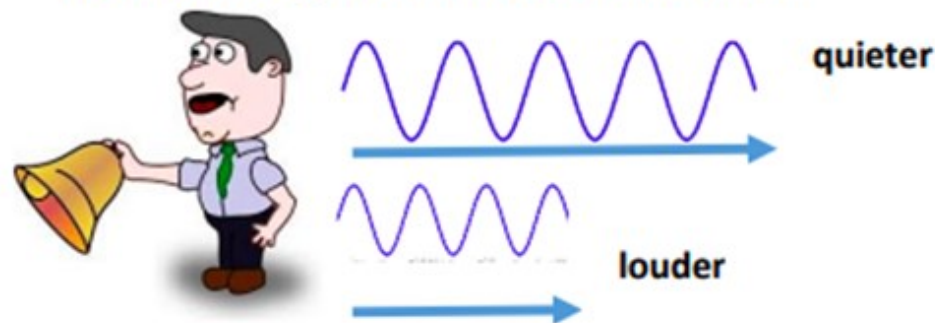
Pre existing knowledge

- Hearing is one of the five senses.
- Sounds can be combined using musical instruments.
- What the word vibration means.

Key Vocabulary	
Vibration	A movement backwards and forwards.
Sound wave	Vibrations travelling from a sound source.
Volume	The loudness of a sound.
Amplitude	The size of a vibration. A larger amplitude = a louder sound.
Pitch	How low or high a sound is.

Volume:

- The closer you are to the **source** of the sound, the **louder** the sound will be.
- The further away you are from the **source** of the sound, the **quieter** the sound will be.



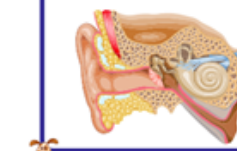
Pitch is a measure of how high or low a sound is. A whistle being blown creates a high-**pitched** sound. A rumble of thunder is an example of a low-**pitched** sound.



HOW YOU HEAR

Sounds are really vibrations in the air. Your ears collect the vibrations and funnel them into the ear drum.

The ear drum shakes and passes the vibrations onto three small bones: the **hammer**, **anvil** and **stirrup**. The vibrations then reach the **cochlea**, which is lined with **nerve endings** that send messages to the brain.



The brain then translates the vibrations as sounds.



What is a sound?

A thing that can be heard. The object that makes the sound is called the source.

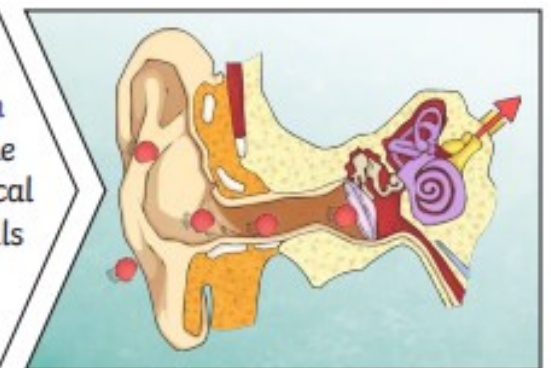
How do sounds travel?

Sound waves travel through a medium (such as air, water, glass, stone or brick). For example, if somebody is playing music in the room next door, the sound can travel through the bricks in the wall.

How do we measure sound?

Amplitude measures how strong a sound wave is.

Inside your **ear**, the **vibrations** hit the **eardrum** and are then passed to the middle and then the inner **ear**. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.



If you throw a stone in a pond, it will produce ripples. As the ripples spread out across the pond, they become smaller. When sound **vibrations** spread out over a **distance**, the sound becomes quieter, just like ripples in a pond.

